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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,222	11/09/2004	Koki Ikeda	2004 1539A	5125
513	7590	07/14/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			BOYKIN, TERRESSA M	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			1711	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/509,222

Applicant(s)

IKEDA ET AL.

Examiner

Terressa M. Boykin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/04, 12/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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**Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

**35 USC 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 8-12, 16-18, 21-28, 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5409975 see abstract, cols. 3-12, claims and further in view of US 20030055210 with regard to claim 3.

US 5409975 discloses an aromatic polycarbonate copolymer obtained by reacting a dihydric phenol component comprising mainly 2,2-bis(4-hydroxyphenyl)-1,1,1,3,3,3-hexafluoropropane and 9,9-bis(4-hydroxyphenyl)fluorene or 1,1-bis(4-hydroxyphenyl)-1-phenylethane in a prescribed ratio with a carbonate precursor substance. This aromatic polycarbonate copolymer has a specific viscosity in a limited range. The aromatic polycarbonate copolymer is excellent in optical characteristics, transparency, hydrolysis resistance, heat resistance, oxidation resistance, and heat stability and good in moldability, and is suitable for a plastic optical waveguide that is small in transmission loss and excellent in heat resistance.

With regard to claims 3 and 8, the reference discloses a polycarbonate prepared from the same components as claimed by applicants except for the use of the polycarbonate as a light path converting part or a part for reflow soldering. However, polycarbonates are known to be used a part for reflow soldering. Note US 20030055210 discloses for example several polycarbonates for reflow soldering of electronic parts. Secondly, the polycarbonate of the reference above could be used as a light path converting part due to its inherent characteristics of light transmittance. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polycarbonate of US 5409975 to be used as parts for reflow soldering of electronic or a light path converting part since such are common uses for polycarbonates and the characteristics as disclosed in the resulting polymer would lead one of ordinary skill to use them as such.

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With regard to claims 5 and 6 note example 10, and cols. 11 and 12.

With regard to claims 16 through 18, there exist no patentably distinct feature of the disk which one would consider unobvious. The use of reflective layers and transparent protective layers is known. . It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct such layers as needed in order to optimize the disk according to the desired article needed.

With regard to claims 21 –28 there also appears to be no patentably distinct feature, the use of a polycarbonate for plastic mirrors is widely know. The characteristics as disclosed by the reference would lead one of ordinary skill in the art to use the compositions a substrate for a mirror. Further the size and/or shape of the resulting mirror is of no patentably distinct feature.

With regard to claims 29 –33 there appears to be no patentably distinct feature, use of carbon filler with polycarbonates is widely known. The reference discloses that the composition may also contain other agents, moieties etc.

#### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 7,13-15, 19, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5409975 abstract, cols. 2-5, example 10, and cols. 11 and 12 and claims.

With regard to claims 1-2, 13-15, 20, US 5409975 discloses an aromatic polycarbonate copolymer obtained by reacting a dihydric phenol component comprising mainly 2,2-bis(4-hydroxyphenyl)-1,1,1,3,3,3-hexafluoropropane and 9,9-bis(4-hydroxyphenyl)fluorene or 1,1-bis(4-hydroxyphenyl)-1-phenylethane in a prescribed ratio with a carbonate precursor substance. This aromatic polycarbonate copolymer has a specific viscosity in a limited range. The aromatic polycarbonate copolymer is excellent in optical characteristics, transparency, hydrolysis resistance, heat resistance, oxidation resistance, and heat stability and good in moldability, and is suitable for a plastic optical waveguide that is small in transmission loss and excellent in heat

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resistance. The specific viscosity and other parameters note example 10, and cols. 11 and 12.

With regard to claims 7, note that they may be used for application in the field of information disks, optical fibers, lenses, etc. further, the polycarbonate was compression-molded at 280.degree. C. into a disk of diameter 40 mm and thickness 2 mm, and the light transmittance of the disk was measured.

The reference discloses a polycarbonate prepared from the same components as claimed by applicants. Any properties or characteristics inherent in the prior art, e.g. although unobserved or detected by the reference, would still anticipate the claimed invention. Note *In re Swinehart*, 169 USPQ 226. "It is elementary that the mere recitation of a newly discovered...property, inherently possessed by things in the prior art, does not cause claim drawn to those things to distinguish over the prior art". Since the disclosed parameters, flexural modulus, tan measured, deflection temperature etc. are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

### **Correspondence**

**Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is ( 571-272-1700).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb

  
**Examiner Terressa Boykin**

**Primary Examiner**

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